

# Fort Belvoir

## Fort Belvoir Elementary School II

Fort Belvoir, Virginia

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Submitted by the United States Department of the Army

Final Site and Building Plans

Web Posting Summary

**Commission meeting date:** March 5, 2015

**NCPC review authority:** Advisory – Federal Project in the Environs (40 U.S.C. § 8722 (b)(1))

**Applicant request:** Final approval of site and building plans

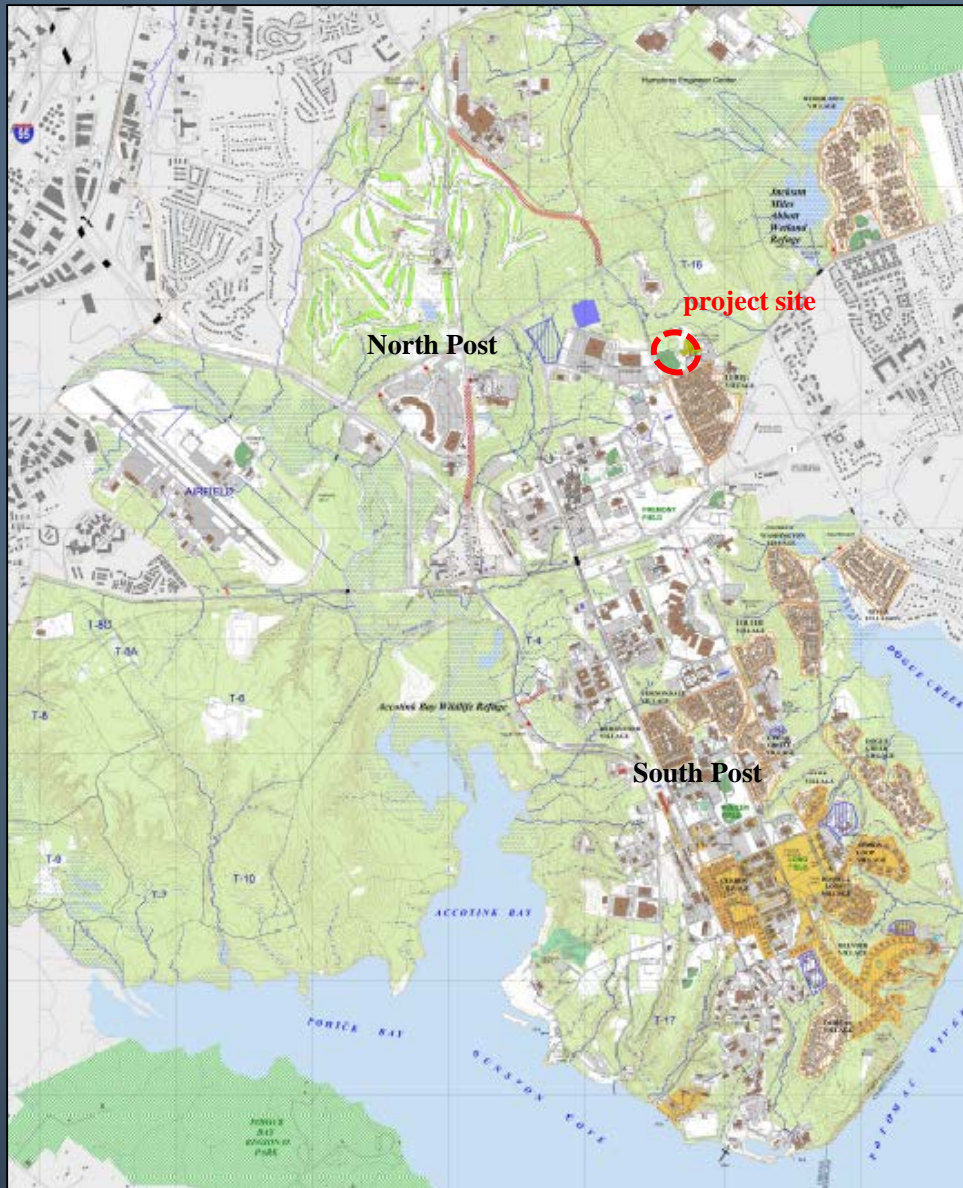
**Delegated / consent / open / executive session:** Consent Calendar

**NCPC Review Officer:** Michael Weil

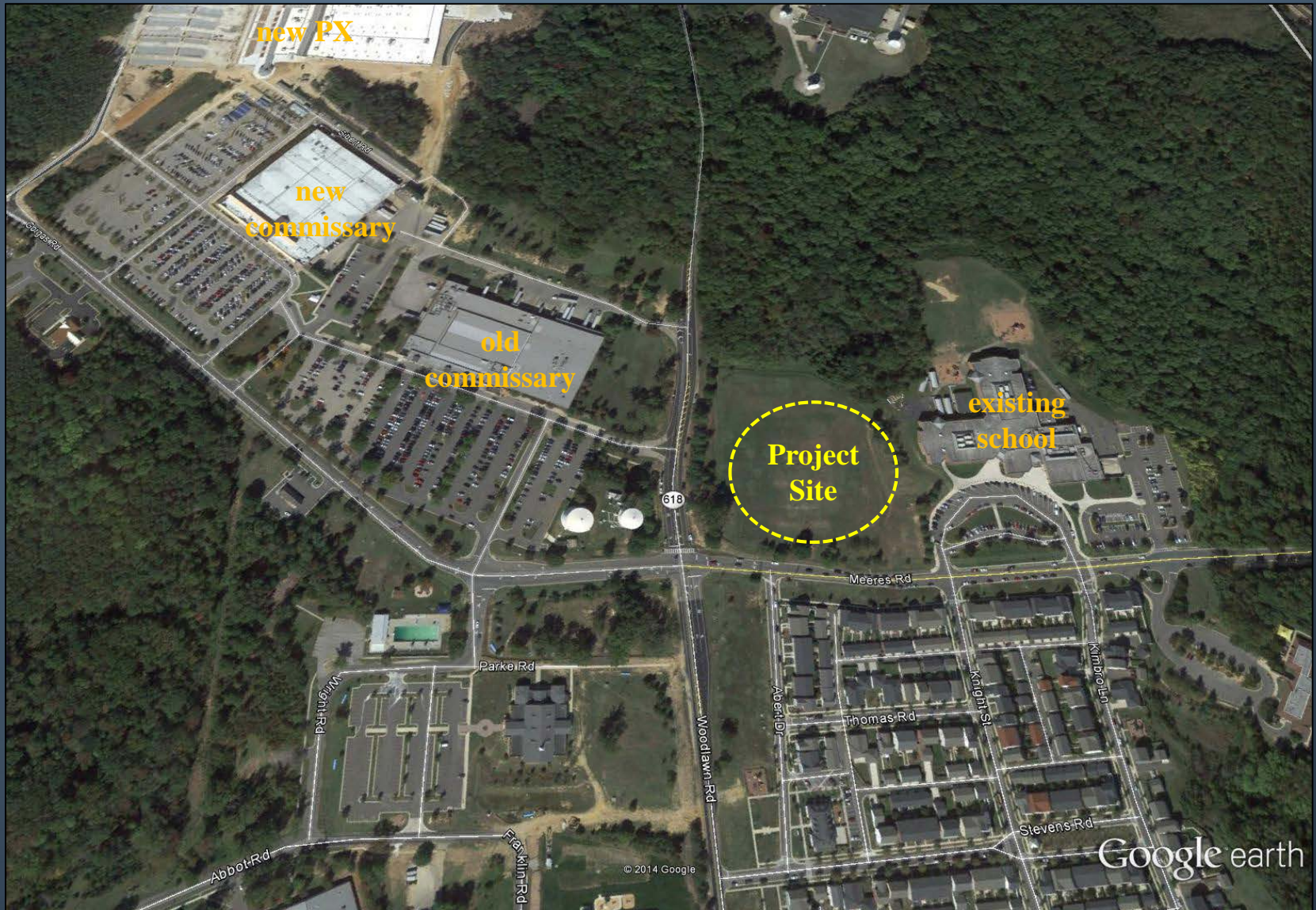
**NCPC File number:** 7595

## **Project Summary:**

The United States Department of the Army proposes to construct a new (2<sup>nd</sup>) elementary school building on the west-side of the existing Fort Belvoir Elementary School, near the Gorgas Road / Meeres Road / Woodlawn Road intersection. The overall project site is approximately 19.8-acres in area, across from the future North Post Town Center (with the new Commissary and PX). The school building is designed with a 57,000 footprint and a total program area of 95,000 square feet, between two-levels, with classroom space on the upper level, and classroom, administrative office, cafeteria, indoor recreation, and auditorium space on the ground-level. Once complete, the new school will accommodate a total of 95 full-time staff, with 86 new on-site parking spaces to accommodate ADA, full-time staff, part-time staff, and visitor parking (overall 90% ratio). In comparison, the existing elementary school is approximately 135,000 square feet in area, houses 160 full-time staff, with 178 parking spaces (overall 111% ratio). The project plans show an increase of on-site vegetation/landscaping, and the project submission demonstrates the project's compliance with EISA, Section 438 and Virginia State stormwater management requirements via Applicant narrative and final site plan.





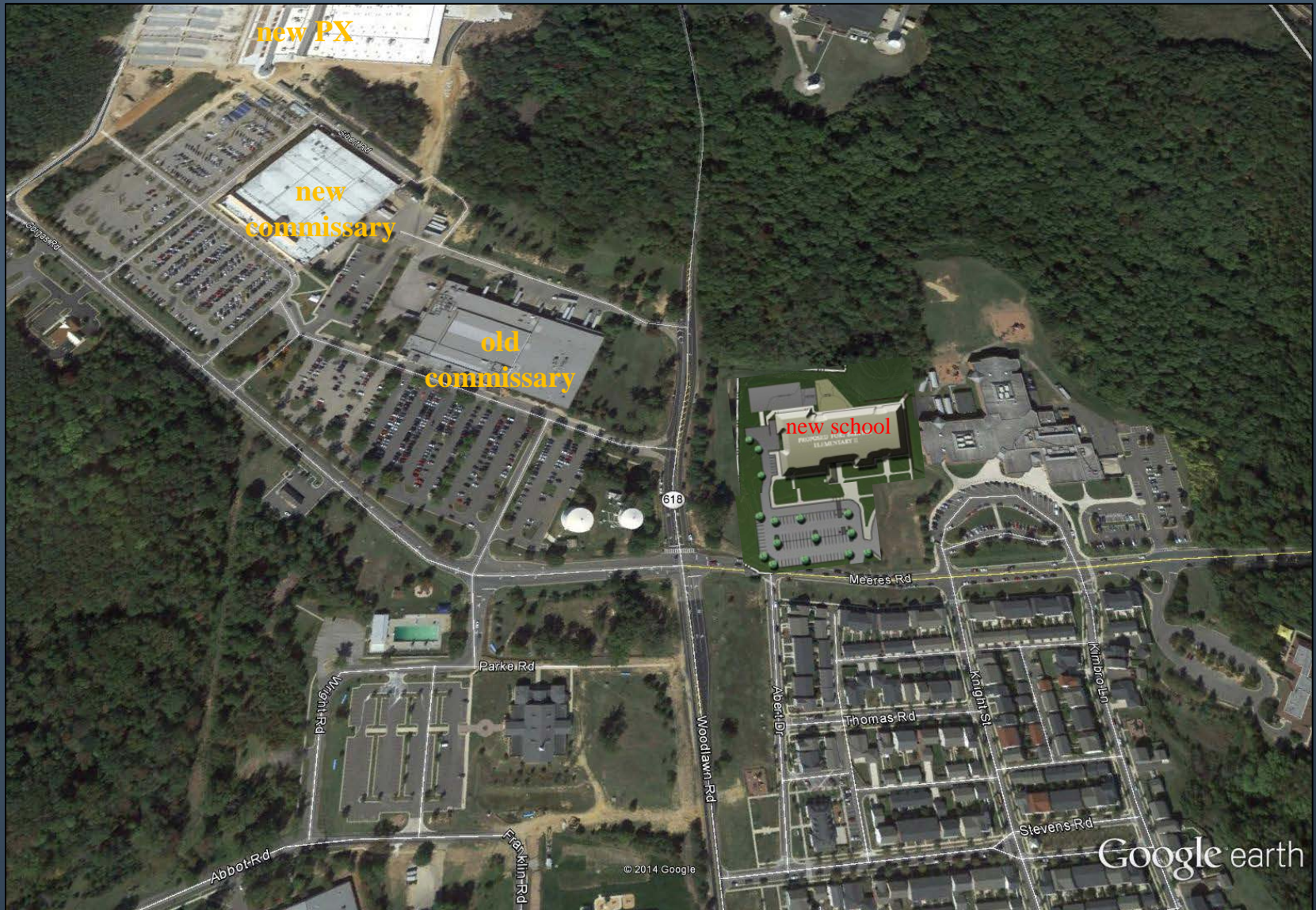




# Fort Belvoir North Post Town Center Concept Plan

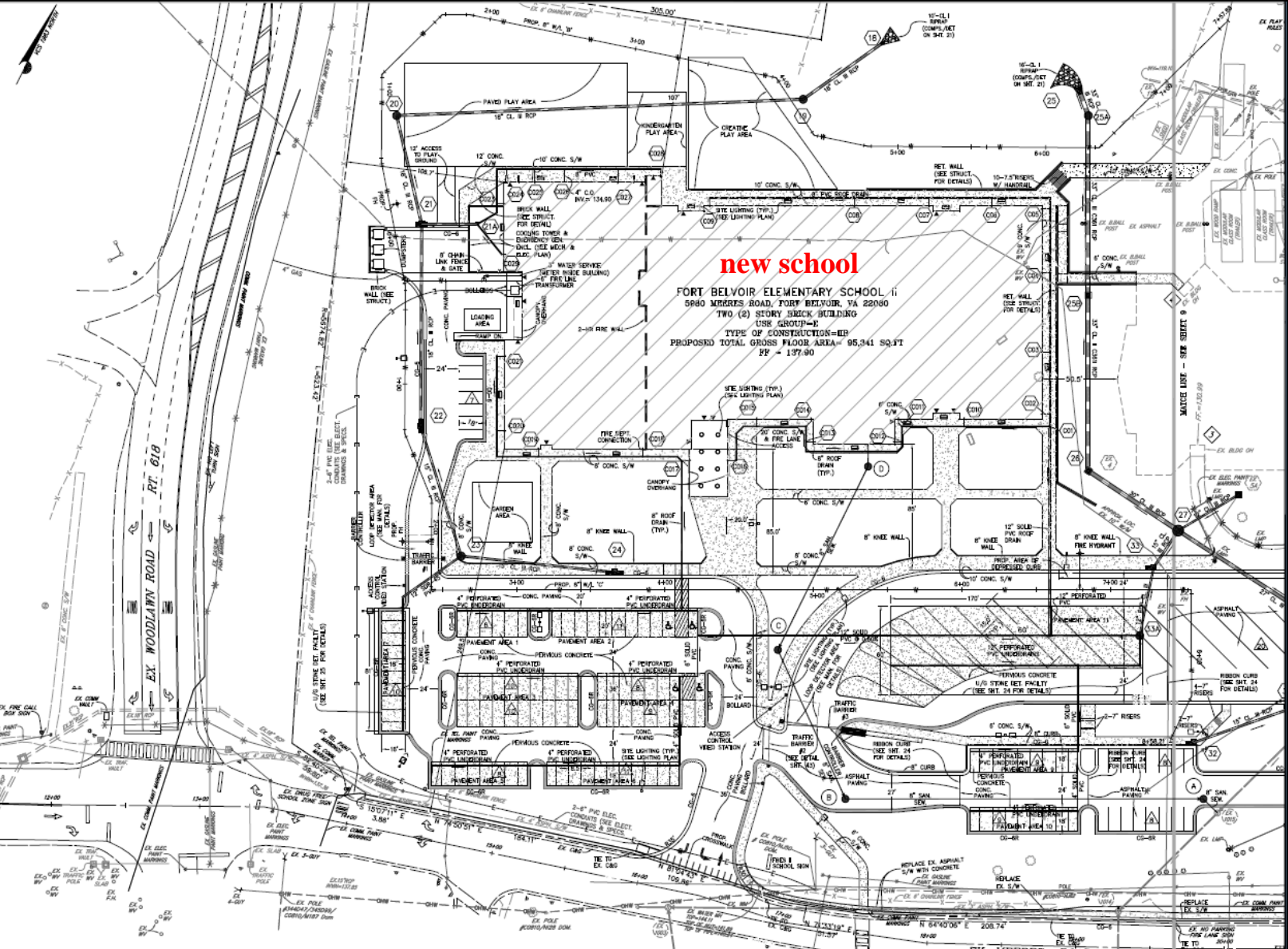










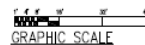
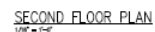








FIRST FLOOR	57,021 SF
SECOND FLOOR	38,320 SF
TOTAL BOTH FLOORS	95,341 SF













# Analysis and Compliance – Applicant Response # 1

The Commission:

**Approves** the preliminary site and building plans for the Fort Belvoir Elementary School II, located at Fort Belvoir, North Post, in Fairfax County, Virginia.

**Notes** the Commission lacks sufficient information to make a determination regarding the proposal's consistency with the Comprehensive Plan employee parking ratio goal applicable to this project, and therefore **requests** the following information prior to the applicant submitting for final review:

- The number of parking spaces reserved for staff at the new and existing schools,  
Fairfax County Public Schools' Response: We only reserve parking for office staff and maintenance. The existing school has fifteen (15) reserved spaces for staff. The new school will have a similar amount.

The design of the total parking spaces for both buildings was based upon our known history of constructing this same building multiple times at different locations. The average parking for this new school design is one-hundred and thirty-six (136) spaces for an average staff of one-hundred and one (101). This is in line for the new school staffing of ninety-five (95) and yet we have shown a decrease in the parking spaces to be less than the anticipated staffing. Our experience with the existing one-hundred and forty-three (143) elementary schools within our inventory has proven that our parking spaces are always short of actual parking needs.

We would also like to point out that a review of our visitor log for this site shows that an average of twenty-two (22) visitors arrive at the school each day. These visitors are parents, additional part-time staff and volunteers that are already committed to the success of the school.

## Additional Response:

The existing full time school staff consists of 160 employees with 178 parking spaces. These spaces do not include bus parking or loading stalls. The 178 parking spaces does include all required ADA parking spaces as well as part time employees that work various hours each day as well as visitor spaces and support staff. This equates to 111% as a parking ratio. The new building staff employee numbers are expected to be 95 and we have provided 86 parking stalls that includes parking for ADA, full time staff, part time staff that work various hours each day as well as visitor spaces and support staff. This equates to a parking ratio of 90% for building II. Therefore the combined staff (255) to parking (264) ratio is 104%.

As stated previously, we have built and renovated many elementary schools and we have provided similar parking at those buildings and it is our normal standard to provide enough parking for full and part time staff, volunteers, visitors and support staff for each school to avoid parking within the adjacent neighborhoods.



**Notes** the Commission lacks sufficient information to make a determination regarding the proposal's consistency with the Comprehensive Plan employee parking ratio goal applicable to this project, and therefore requests the following information prior to the applicant submitting for final review:

- The number of staff who will commute from outside of Fort Belvoir to work at the new and existing schools.

Fairfax County Public Schools' Response: We currently have nine (9) staff members that live on post.

At this time we do not have any information concerning the staffing of the new school and therefore additional information of their residency is not available.

Requests additional documentation demonstrating compliance with the federal stormwater requirements of Section 438 of the Energy Independence and Security Act (EISA), prepared in accordance with the U.S. Environmental Protection Agency's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*, as well as the requirements of the 2012 Virginia Stormwater Management Act, as applicable.

Fairfax County Public Schools' Response: The site plan has been designed using the 95<sup>th</sup> percentile storm event and calculated as 1.5" of rainfall depth using 30 years of historical rainfall data from the National Climatic Data Center at Reagan National Weather Station. EISA 438 storm water runoff guidelines require the retention of the 95<sup>th</sup> percentile storm using onsite management practices for the increase in impervious area with improvements onsite.

Approximately 3.96 acres of impervious area will be added to the site with this site plan. Using reduction factors allowed by the EISA 438 technical guidelines, the rainfall depth to be retained across the entire site area has been calculated as 0.18". This results in a volume of 12,928 cubic feet of water to be retained to meet the EISA 438 regulations. The use of pervious concrete and underground stone infiltration facilities are designed to meet these requirements. Our soil borings and infiltration rate testing shows that we will achieve infiltration rates of 0.81 in./hour under the larger pavement areas and 0.52 in./hour under the smaller pavement areas.

## Additional Response:

We feel that we have complied with the EISA 438 requirements. We have submitted our plans to VA DEQ and to the base stormwater reviewer. We have received a VA DEQ permit (General Permit No. VAR10E390) dated August 22, 2014 for this project. A copy of the referenced permit as well as a copy of those drawings that were submitted for the permit are attached.



# Analysis and Compliance – Applicant Response # 4

**Requests** the applicant to refine the proposed site plan to better address on-site and local area pedestrian circulation, and **recommends** the following specific revisions:

- Addition of a sidewalk connection between the Meeres Road/Woodlawn Road intersection and new school main entrance area, along the west-side of the new parking lot,  
Fairfax County Public Schools' Response: A sidewalk connection to the west side of the new parking lot is not feasible due to grade conditions. Access to the school from Meeres Road at the new main entrance has been provided.

## Additional Response:

There may have been some communication issues on this issue in the past. A site visit was conducted this week to review the existing conditions of the sidewalk at Meeres Road. We feel that you are talking about the existing asphalt path that runs parallel to Meeres Road and not north along the west side of the proposed parking lot? The existing bus loop exit will be removed upon completion of our site work during the summer of 2016. All of the existing asphalt trail that lies between the existing bus loop entrance and the new kiss and ride entrance to the new building will be replaced with 4 foot wide concrete sidewalk in the same location and grade. The existing asphalt trail that lies to the west of the new kiss and ride entrance to the new building will remain. There will not be any new access points within the perimeter fence from Meeres Road outside of the vehicle access points as shown. Please see the attached sheets SP1 and SP2 for clarification.



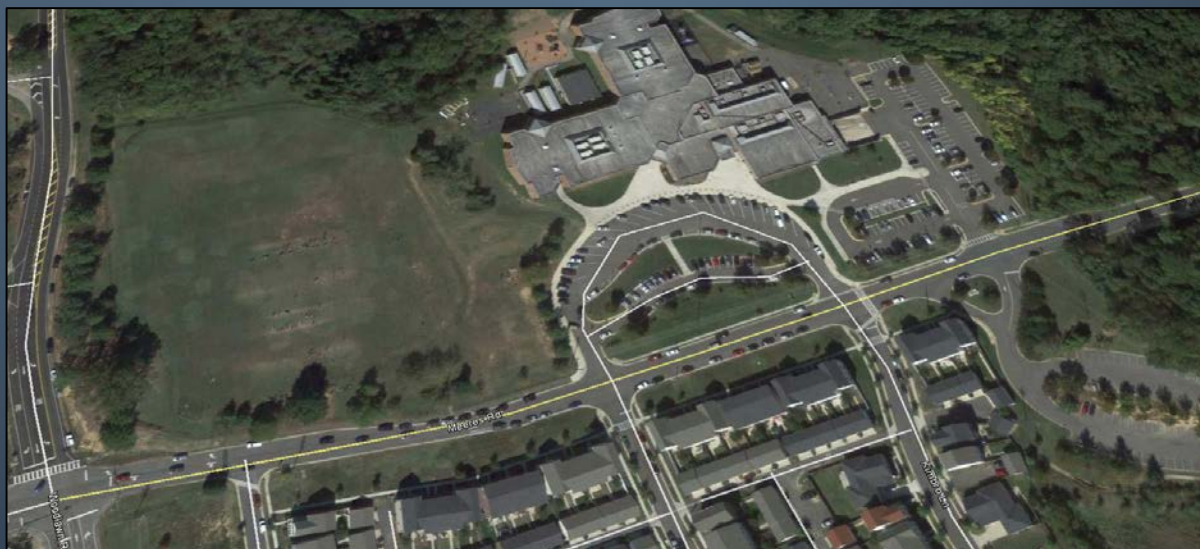
# Analysis and Compliance – Applicant Response # 5

**Requests** the applicant to refine the proposed site plan to better address on-site and local area pedestrian circulation, and **recommends** the following specific revisions:

- Addition of crosswalks to support both on-site pedestrian circulation and likely natural crossing points along Meeres Road,  
Fairfax County Public Schools' Response: Crosswalks at all entrances to the site are provided and they connect to existing Meeres Road crosswalks.

## Additional Response:

A site visit was conducted this week to review the existing conditions of the existing crosswalks at Meeres Road. There is an existing crosswalk from the community across from the school site that aligns with the existing bus loop entrance. We will restripe that crosswalk as part of our scope. We are also providing new crosswalks at all new entrances to Meeres Road from the school site. This will allow full pedestrian access on the north side of Meeres Road and the school as well as provide a point of access from the only community exit at Kimbro Lane to the school. This work is shown on the attached drawing SP1 and SP2.





# Analysis and Compliance – Applicant Response # 6

**Requests** the applicant to refine the proposed site plan to better address on-site and local area pedestrian circulation, and **recommends** the following specific revisions:

- Improvement of the sidewalk along the north side of Meeres Road through widening, resurfacing and planting additional street trees.  
Fairfax County Public Schools' Response: The existing sidewalk is not part of the scope to this project and the DOD grant. The trees that have been shown on the current site plan are located to provide for the best usage of the school and for the occupants, maintenance and security. Additional tree plantings under the existing overhead power lines will only cause a future maintenance problem.

## Additional Response:

The area of sidewalk that lies between the school access points is being replaced per our response number 4 above. The area to the west of our new kiss and ride access to the new building is outside of our approved DOD grant work and is not required. An existing asphalt path remains in this area. We will continue to work with all parties on this project.

